

Abstracts

Third-order intermodulation distortion in an optical downconverter

P.D. Biernacki, L.T. Nichols and R.D. Esman. "Third-order intermodulation distortion in an optical downconverter." 1998 MTT-S International Microwave Symposium Digest 98.3 (1998 Vol. III [MWSYM]): 1229-1232.

The first two-tone measurements of third-order intermodulation in a wide-band (1-18 GHz) optical downconverter utilizing cascaded Mach-Zehnder modulators are presented.

Intermodulation originates in the RF modulator and is downconverted along with the fundamentals to intermediate frequencies (IF). The third-order intercept in the IF band is measured and agrees well with theory.

[Return to main document.](#)